

REMARKS

The rejections presented in the Office Action dated February 23, 2007 (hereinafter Office Action) have been considered. Claims 1-35 remain pending in the application. Claims 19-35 have been withdrawn by the Examiner for being directed to a non-elected invention. No claim has been amended, added or canceled. Reconsideration of the pending claims and allowance of the application in view of the present response is respectfully requested.

Claims 1-18 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Applicant respectfully disagrees with the Examiner, and submits that all pending claims comply with the enablement requirement of 35 U.S.C. §112, first paragraph.

On page 3, first paragraph, of the Office Action, the Examiner contends that Applicant's specification does not describe in such a way as to enable one skilled in the art to understand "how the light beam itself can change its property." The Examiner, on pages 3-6 of the Office Action, asserts the same contention with regard to a lack of enabling description as to how the light beam itself changes the particular light beam properties recited in dependent claims 3-10.

Respectfully, the Examiner has mischaracterized Applicant's claimed subject matter. This mischaracterization renders the enablement rejection under 35 U.S.C. §112, first paragraph deficient and without basis. Applicant's claims 1-18 do not require that the light beam itself changes its property.

Claim 1, from which claims 2-18 depend, recites that a light beam emitted by a light-emitting device of a stylus has a property that abruptly changes when the tip of the stylus sufficiently contacts an input surface of a light sensitive input device. Contrary to the Examiner's characterization, claim 1 does not require, nor is it reasonable to construe, that the light beam itself changes its property. One skilled in the art would readily understand from a reading of claim 1 that the claimed apparatus, and not the light beam itself, effects a change in a property of the emitted light beam when the tip of the stylus sufficiently contacts the input surface.

An objective reading of Applicant's claims, particularly when read in light of the specification, makes clear that the Examiner's characterization of the claimed subject matter is in error. For example, Applicant's specification, at page 5, line 21 – page 6, line 2, discloses that:

Any number of mechanisms can be used to produce the detectable, abrupt change in the light beam upon contact of the stylus with a surface. The type of mechanism can depend on the change being produced. For example, when the change can be produced through electronics, it may be desirable to connect an electrical switch to the tip of the stylus so that contacting the tip of the stylus to a surface switches the device from one emitting state to another emitting state. As another example, when the change can be produced through optics, it may be desirable to configure a lens or an aperture in the tip of the stylus so that contacting the tip of the stylus to a surface changes the distance between the light source and the lens or aperture, thereby changing the spread of the beam in a detectable manner. As another example, the mechanism may be a mechanical switch that changes an aperture size, changes a color or polarization filter condition, or the like. [Emphasis added].

Applicant's specification further discloses, at page 8, line 24 – page 9, line 4 and with reference to Figures 2(a)-(c):

When the tip is not in contact with a surface, an electrode 222 attached to the light guide engages a first switch electrode 218, the action of the spring 216 maintaining the contact. This completes a first circuit that causes light-emitting device 212 to emit light having a certain set of characteristics. When the tip is in contact with a surface, the tip is pushed back into the housing so that electrode 222 engages a second switch electrode 220. This completes a second circuit that causes light-emitting device 212 to emit light having a different set of characteristics that are distinguishable by the light detector array. For example, the circuit including switch electrode 218 may include a different resistor than the circuit including switch electrode 220, thereby changing the intensity of the light beam. The switch

mechanism may also affect the modulation of the light beam, the color of the light beam, and so forth. [Emphasis added].

Concerning, in particular, the rejection of claim 3, reference is made to the above excerpt from Applicant's specification that provides enabling support for the mechanism that abruptly changes beam intensity. Enabling support for the mechanisms that abruptly change the light beam properties recited in claims 4-10 can be found throughout Applicant's specification (e.g., pages 3, line 13 – page 11, line 5).

In the Office Action, the Examiner makes repeated reference to Figure 2C and the description on page 9, but ignores other portions of Applicant's specification that provide enabling support for Applicant's claimed subject matter (e.g., see specification excerpt above relative to a mechanisms for changing the intensity of the light beam as recited in claims 3 and 14). Applicant believes it unnecessary to identify specific support for each of the rejected dependent claims, as one skilled in the art would readily identify such supportive subject matter upon reading the specification.

Concerning the rejection of claims 13-18 on the basis of lack of enablement, Applicant respectfully submits that the Examiner has mischaracterized Applicant's claimed subject matter recited in claims 13-18. This mischaracterization renders the enablement rejection of claims 13-18 under 35 U.S.C. §112, first paragraph deficient and without basis.

Applicant makes reference to selected portions of the specification that provide enabling support for claims 13-18:

In some embodiments, a switch can be provided on the stylus so that a property of the light beam can be changed in a manner detectable by the array of light sensors independent of whether the input surface is contacted with the stylus. This auxiliary switch can be used to select the same or a different operative function as that selected by contact of the stylus with the input surface. The auxiliary switch can control a beam on/off function, signify a left or right mouse button click action, and so forth. [Applicant's specification, page 4, lines 3-8].

FIG. 3 shows a light-emitting stylus 310 that includes a side, or auxiliary, switch 320 for activating or changing properties of an emitted light beam B regardless of whether a tip switch (not indicated) is activated. The side switch can be a pressure activated switch that makes or breaks an electrical contact, resulting in a signal. The signal may be a change in the stylus beam such as a change in beam intensity, duty cycle of a modulated beam, frequency of modulation of the beam, color of the beam, polarization of light in the beam, the on/off condition of the beam, and so forth. The change in stylus beam may be detected by the light sensors of a user input device and may be interpreted as the equivalent of a right or left mouse click, or a change in status of the stylus. The side switch 320 may be a capacitive sensing transducer that activates when touch contact is made to a specified area of the stylus housing. [Applicant's specification, page 10, lines 1-10, emphasis added].

One skilled in the art would readily understand from Applicant's specification that the auxiliary switch recited in claims 13-18 may be activated to cause a change in the light beam. For example, and as is clearly described in the excerpts above, the auxiliary switch 320 may be used to effect a detectable change in the stylus beam, such as by a user, to select the same or a different operative function as that selectable by contact of the stylus with the input surface.

Any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention without undue experiment. *Mineral Separation v. Hyde*, 242 U.S. 261, 270 (1916); *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). A patent need not teach, and preferably omits, what is well known in the art. *In re Buchner*, 929 F.2d 660, 661 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1463 (Fed. Cir. 1984).

MPEP 2164.01(a) identifies a non-exhaustive list of factors that the Examiner must consider when determining whether there is sufficient evidence to support a determination that

a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is "undue." These factors include, but are not limited to: (A) the breadth of the claims; (B) the nature of the invention; (C) the state of the prior art; (D) the level of one of ordinary skill; (E) the level of predictability in the art; (F) the amount of direction provided by the inventor; (G) the existence of working examples; and (H) the quantity of experimentation needed to make or use the invention based on the content of the disclosure.

Respectfully, the Examiner has not met the requirements of MPEP 2164.01(a). The Office Action provides no indication that the Examiner's conclusion of non-enablement is based on an analysis of the factors set forth in MPEP 2164.01(a). It is improper to conclude that a disclosure is not enabling based on an analysis of only one of the above factors while ignoring one or more of the others. The Examiner's analysis must consider all the evidence related to each of these factors, and any conclusion of nonenablement must be based on the evidence as a whole. *In re Wands*, 858 F.2d 731, 737, 740 (Fed. Cir. 1988).

Because the Examiner has not met the requirements of MPEP 2164.01(a), the enablement rejection of claims 1-18 under 35 U.S.C. §112, first paragraph is without basis and must be withdrawn.

Claims 1, 2, 9, 11-13, 17 and 18 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,320,292 to Oikawa et al. (hereinafter "*Oikawa*").

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Therefore, all claim elements, and their limitations, must be found in the prior art reference to maintain a rejection based on 35 U.S.C. §102.

Claim 1, from which all pending claims depend, recites, among other features, a light beam having a property that abruptly changes when the tip of the stylus sufficiently contacts an

input surface. Claim 1 further recites that the abrupt change in the light beam is detectable by a light sensitive user input device.

The Examiner relies on column 6, lines 45-64 of *Oikawa* as purportedly teaching Applicant's claimed features of a stylus that provides a light beam having a property that abruptly changes when the tip of the stylus sufficiently contacts an input surface of an input device, and that the abrupt change in the light beam is detectable by the light sensitive user input device.

The portion of *Oikawa* relied on by the Examiner is reproduced below:

FIG. 3 shows the construction of the light pen 10 and FIGS. 4A and 4B show its electrical connection. The light pen comprises a cylindrical casing 31 made of metal or resin, a battery B, a circuit board 32, a reed switch S₁, and a light source which may be a light emitting diode LD which emits a large quantity of infrared rays, the above components being contained in the casing 31. A source switch S₂ is provided for one end of the casing, and a tapered or conical tip 34 is slidably received in the opening 33 at the other end. The tip 34 is normally biased to project by a spring not shown but it retracts into the casing when the light pen is urged against the surface of the optical guide channel so that a permanent magnet 36 secured to the inner end of the tip 34 actuates the reed switch S₁. A focusing lens 37 is contained in the tip 34 so that when the light emitting diode LD luminesces as the result of the operation of the reed switch S₁ caused by the retraction of the tip 34, the light is focused to form a light beam which is projected through the tip.

Respectfully, this portion of *Oikawa* relied on by the Examiner fails to teach, expressly or inherently, that the light emitted by light emitting diode LD is changed, abruptly or otherwise, in the manner recited in Applicant's claim 1. This portion of *Oikawa* also fails to teach, expressly or inherently, that any abrupt change in the light beam, if such were present, is detectable by *Oikawa*'s coordinate input apparatus. Applicant's review of the *Oikawa* reference indicates an absence of express or inherent teaching of at least these features of Applicant's claim 1.

Applicant respectfully submits that *Oikawa* does not teach every element of claim 1, and therefore fails to anticipate Claim 1.

Dependent claims 2, 9, 11-13, 17, and 18, which are dependent from independent claim 1, were also rejected under 35 U.S.C. §102(b) as being anticipated by *Oikawa*. While the Applicant does not acquiesce to the particular rejections to these dependent claims, it is believed that these rejections are now moot in view of the remarks made in connection with independent claim 1. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from *Oikawa*. Therefore, dependent claims 2, 9, 11-13, 17, and 18 are also not anticipated by *Oikawa*.

For at least these reasons, Applicant respectfully submits that the rejection of claims 1, 2, 9, 11-13, 17, and 18 as being anticipated by *Oikawa* is not sustainable, the withdrawal of which is respectfully requested.

Claims 3-8, 10, and 14-16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Oikawa*.

Establishment of *prima facie* obviousness requires that all claim limitations be taught or suggested in the prior art references. (MPEP § 2143). As discussed above, *Oikawa* fails to teach or suggest a stylus that provides a light beam having a property that abruptly changes when the tip of the stylus sufficiently contacts an input surface of an input device, and that the abrupt change in the light beam is detectable by the light sensitive user input device. Each of claims 3-8, 10, and 14-16 depend from independent claim 1. Independent claim 1 is not obvious for at least the reason that *Oikawa* fails to teach or suggest each and every limitation recited in each claim. Furthermore, while the Applicant does not acquiesce to the particular rejections to these dependent claims, it is believed that these rejections are now moot in view of the remarks made in connection with independent claim 1. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from *Oikawa*. Moreover, if an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Therefore, dependent claims 3-8, 10, and 14-16 are not rendered obvious by *Oikawa*.

Applicant respectfully submits that the Examiner's taking of Official Notice on page 10 of the Office Action is inappropriate. The Examiner's taking of Official Notice is predicated on the legitimacy of the Examiner's lack of enablement rejection of the claims under 35 U.S.C. §112, first paragraph. Applicant's arguments presented above clearly establish that the Examiner's lack of enablement rejection of the claims under 35 U.S.C. §112, first paragraph is without basis. The Examiner's taking of Official Notice is also without basis and inappropriate.

As such, the Applicant respectfully requests withdrawal of the §103(a) rejection of claims 3-8, 10, and 14-16 and notification that these claims are in condition for allowance.

It is to be understood that Applicant does not acquiesce to the Examiner's characterization of the asserted art or Applicant's claimed subject matter, nor of the Examiner's application of the asserted art or combinations thereof to Applicant's claimed subject matter. Moreover, Applicant does not acquiesce to any explicit or implicit statements or conclusions by the Examiner concerning what would have been obvious to one of ordinary skill in the art, obvious design choices, alternative equivalent arrangements, common knowledge at the time of Applicant's invention, officially noticed facts, and the like. Applicant respectfully submits that a detailed discussion of each of the Examiner's rejections beyond that provided above is not necessary, in view of the clear absence of teaching and suggestion of various features recited in Applicant's pending claims. Applicant reserves the right to address in detail the Examiner's characterizations, conclusions, and rejections in future prosecution.

Applicant respectfully submits that claims 1-18 are in condition for allowance and requests early indication of the same.

Respectfully submitted,

June 25, 2007

Date

By: /Robert J. Pechman/

Robert J. Pechman, Reg. No.: 45,002

Telephone No.: 651-737-0631

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833